

MASKING METHOD

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Cross Reference to Related Application

This application is a continuation of U.S. Patent Application No. 08/682,773 filed July 30, 1996, which was a national stage application submitted
10 under 37 U.S.C. 371 of International Application No. PCT/US95/02893 filed March 2, 1995, and claiming a Priority date of March 8, 1994, on British patent Application No 9404417.9.

Field of the Invention

15 This invention relates to a method of masking a vehicle during spray painting and in particular to a method of masking the "B" post of a vehicle.

Background of the Invention

The "B" post of a vehicle is the pillar situated between the rear edges of the
20 front door and leading edge of the rear door of a vehicle. The "B" post often supports the hinges of the rear door and the fastening catch for the front door. When re-spraying door panels it is necessary to mask the "B" post in such a way as to prevent overspray going through the gap between the front and rear doors. This is a difficult area to mask since the "B" post is often irregularly shaped and dirty
25 and will not readily accept conventional masking materials having pressure sensitive adhesive. Also, the door panels are generally spaced some distance from the "B" post and it is not possible to rely upon the door holding masking material in place by compressing the material against the "B" post with the edge of the door.

Disclosure of the Invention

30 The present invention provides a simple, effective technique for masking "B" posts.

Therefore according to the present invention there is provided a method of masking a vehicle "B" post comprising the steps of:

- providing a resiliently conformable strip of masking material having a width greater than the maximum distance between the trailing edge of the front door adjacent the "B" post and the leading edge of the rear door adjacent the "B" post and a length at least equal to the length of the "B" post to be masked, the strip having pressure sensitive adhesive on a surface adjacent a longitudinal edge of the strip,
- opening said front door,
- applying said strip to the inner surface of the leading edge of the rear door so that the pressure sensitive adhesive securely adheres the strip to conform with the profile of the leading edge and the strip extends across the "B" post to an extent sufficient to overlap with the trailing edge of the front door when said front door is closed, and
- closing the front door to abut said overlap thereby masking the "B" post.

It has been found that by selecting a resiliently conformable masking material e.g. foam strip, thick paper scrim, non-woven material etc., it is readily possible to adhere the masking material to the inner surface of the leading edge of the rear door by pressure sensitive adhesive so that the masking material projects across the "B" post and will maintain this configuration. The front door is closed over the overlapping portion of the masking material. The masking material is sufficiently stiff not to be displaced by the pressure of the paint spray thereby effectively masking the "B" post and preventing ingress of overspray inside the doors.

The masking material is generally has a stripe of pressure sensitive adhesive of from 8 to 12mm wide adjacent one longitudinal edge, normally within 2mm of the edge. In one embodiment the strip may have a second adhesive strip adjacent the other longitudinal edge for adhering to the inside of the trailing edge of the front door. The additional adhesive strip may have a width of from 8 to 12mm and is normally positioned with 2mm of the other edge.

The masking strip may conveniently be provided in the form of a roll wound upon itself, optionally about a core. Therefore according to a further aspect

of the invention there is provided a roll of masking material comprising a foam strip wound upon itself, the foam strip having a width of from 20 to 40mm, a thickness of from 10 to 20mm and pressure sensitive adhesive on a major surface adjacent a longitudinal edge. The masking material may conveniently be formed
5 from foam web by the process disclosed in EP 0384626 (the content whereof is incorporated herein by reference).

The strips may be formed in a parallel array each strip being separable. Therefore according to a further aspect of the invention there is provided a roll of masking material comprising a parallel array of foam strips conjoined and
10 manually separable, each foam strip having a width of from 20 to 40mm, a thickness of from 10 to 20mm and pressure sensitive adhesive on a major surface adjacent a longitudinal edge. The array may be formed by applying an adhesive to a foam web and slitting the web. Alternatively, the array may be formed in accordance with EP 0384626, which results in an array in which the strips have an
15 elliptical or oval cross-section and adjacent strips are joined by longitudinal welded seams that maintain the curvature of the strips.

Brief Description of the Drawing

The invention will now be described with reference to the accompanying
20 drawings in which:

Figure 1 represents an end view of the rear door of a vehicle and associated end post,

Figures 2(a), (b) and (c) represent cross-sections through 2a-2a, 2b-2b and 2c-2c of Figure 1,

25 Figure 3 represents a cross-section through a "B" post and front and rear doors showing the masking in accordance with the invention, and

Figure 4 represents a partial side view of a vehicle showing the front and rear doors.

Detailed Description of the Invention

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Referring to Figures 1 and 2, the "B" post 2 supports the rear door 4 which is mounted by hinges 6. The upper portion of the door 8 adjacent the window is

adjacent the “B” post 2 whilst the lower panel 10 of the door extends away from the “B” post such that there is a significant gap between the “B” post and the edge of the door panel 10.

5 Figures 3 and 4 show the masking material 12 in position masking the “B” post 2. The front door 14 is opened and the masking strip 12 is positioned between the “B” post 2 and the edge of the rear door 4 such that the strip of adhesive 16 is adhered to the edge of the door 4, particularly in the region of the bottom panel 10. If necessary, the rear door 4 can be opened to facilitate positioning of the masking strip 12. The masking strip 12 will follow the contour of the rear door 4 which is
10 identical to that of the edge 18 of the front door 14. Thus, when the front door 14 is closed the edge 18 will abut the masking strip 12 thereby completing a seal. In one embodiment, the masking strip will include a strip of pressure sensitive adhesive in the region of contact with the edge 18 of the front door 14. The masking material is sufficiently resilient to maintain its position around the contour
15 of the lower panel 10 during the paint spraying operation thereby preventing ingress of paint to the “B” post and interior of the vehicle.